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ABSTRACT

Project BUILD (Bilingual Understanding Incorporates Learning Disabilities) combined the methodology and concerns of both special education and bilingual education to provide appropriate, supplemental educational treatment and opportunities to bilingual children with learning disabilities. Children in grades one through five received individualized and small group educational and therapeutic treatment outside of their regular classrooms. Additional program components included curriculum development, staff development, and parent involvement and education. The project was evaluated through reading achievement data, consultant observations, interviews with program staff, and questionnaires completed by teachers and parents. The evaluator found that program reading objectives were attained and other program components were well implemented. Tables of data are included. (MK)

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FINAL EVALUATION REPORT
PROJECT BUILD

"Bilingual Understanding Incorporates Learning Disabilities"

An ESEA Title VII Basic Bilingual Education Program

1979-80

COMMUNITY SCHOOL DISTRICT 4

Function # 5001-07604-07603

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NATIONAL INSTITUTE OF EDUCATION

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SECTION I - PROGRAM DESCRIPTION

Project BUILD (Bilingual Understanding Incorporates Learning Disabilities) was established in September, 1976 in New York Community School District 4, (Manhattan's East Harlem), under the provision of the ESEA Title VII. This evaluation study represents its fourth year of operation. Project BUILD is a unique bilingual education program. This is so because the Project combines the methodology and concerns of both special education and bilingual education. Its principal aim is to provide appropriate, supplemental education treatment and opportunities for bilingual children with learning disabilities. Major activities of the program include:

- Identification and selection of bilingual children who have or may have learning disabilities
- Providing diagnostic evaluations of psycho-educational functioning of children.
- Individualized and small group educational and therapeutic treatment outside of the regular classroom.
- Curriculum and material resource development to support the above activities.
- Promoting the understanding of learning disabilities among the bilingual parents of children in the Project and involving such parents in appropriate and supportive educational processes.

The Project BUILD staff consists of a Project Director, responsible for overall implementation and management; a family assistant who serves as a lisison between the project and the parents, and community, who follows up on the individual children who are treated by external agencies (medical examinations and treatment at local hospitals, clinics, etc.); three Bilingual Learning Disabilities Specialists; a Psychologist, used as a consultant for the purpose of psychological test and evaluation of the children selected for the program's direct services; and three Educational Assistants.

Project BUILD provides educational and therepeutic services to 100 children of the Elementary School Level in grades one through six. During the year 1979-80 the major concerns of the project specialists have been the development of the pupil's communication skills in their dominant language; minimizing the negative effects of the students specific learning disabilities on the development of said skills and on their personal and social development. The children attend "Bilingual Centers" at two public schools which provide programs for bilingual instruction, P.S. 72 and P.S. 155. Each center is staffed by a Bilingual Learning Disability Specialist and one or two Educational Associates. One of the centers is in a non-public school, St. Paul's. The resource room at St. Paul's is staffed by a Bilingual Learning Disability Specialist. No Educational Associate is provided.

Bilingual children who are diagnosed as learning disabled are instructed daily for 45 minutes. Instruction is individual and when necessary in small groups. The practice of setting aside Fridays for staff meetings, record keeping, material development, etc. was discontinued for the year of 1978-79. The Project teachers and staff considered that given the experiance gained by them at this stage of Project BUILD's development, the time can be better used for student instruction.

The assessment, instructional diagnosis and edcuational evaluation of the program's students, as well as individual programs for instruction are prepared by the Bilingual Learning Disability Specialists. The program is concerned with the communication skills of the students mainly in their dominant languag; their specific learning problems and their personal and social development. The diagnosis and individual programs of instructions are discussed with the regular classroom bilingual teachers so as to get their input on the recommendations and to insure follow-up of treatment in their classes.

SECTION II: EVALUATION DESIGN

The evaluation design for Project BUILD was described in the original Project Application of 1976 (pp. 66-78), modified in 1976-77 and 1977-78, and the 1979-80 design model will follow that of 1979-80.

PUPIL ACHIEVEMENT

The major concern of the project this year was centered around the pupil's communication skills, with emphasis on the development of reading in the student's dominant language. The objectives related to reading skills in English as well as in Spanish will be the focus of this evaluation. These objectives require that each dominant language grade group demonstrate improvement in reading rate as a result of being educationally serviced by the Project. The progress in other educational areas or social skills were not to be formally measured.

The Inter-America Series (IAS) Test of Reading and Prueba de Lectura, Levels I and II were to be used to evaluate the pupil's dominant language reading achievement in English or Spanish. All the Pre-Test forms were to be given in the fall and the Post-Test froms were to be given at the end of the school year. The IAS raw scores were converted to an experi-

mental set of grade equivalent (GE) scores which were developed by the Project's previous evaluator. A total of twelve (12) evaluation objectives (two (2) languages times six (6) grades) will be evaluated if pairs of usable scores are available.

The evaluation objectives for dominant language reading, as in the previous year, can be stated as follows:

> The instruction and services provided by the Project will result in the pupil's gain in dominant language reading skills (as measured by the Inter-American Series Test of Reading and Prueba de Lectura, as demonstrated by a statistically P = .05) mean gain in growth in total grade equivalent scores on each battery, as indicated by a comparison of their pretest to posttest mean gains during the year, with their average gains of previous years which are to be computed from their pretest scores.

That is, it was required that each grade group demonstrated an improvement in reading growth rate after beginning in the program. To determine if gains in reading made by the pupils at each grade level were attributable to the program, the Bond and Tinker procedure will be used. This proceedure treats each pupil as its own control. For the First Grade Pupil without previous school experience, (not a repeater), the "normal" rate of growth inherent in the grade equivalent scores for these reading test (0.1 grade equivalent per month) will be assumed, starting from their actual pretest scores, in order to derive an "expected" or "predicted" posttest score. This expected score was then to be compared with the pupil's actual posttest score.

EVALUATION OF EDUCATIONAL PROCESSES

SELECTION

The evaluation data on the effectiveness of Project selection proceedures was to be obtained by means of staff interviews, examination of Project documents and the study and review of pupils screening and achievement records.

DIRECT SERVICES

For the assessment of direct services provided by the Project's staff to the participating pupils the Consultant was to visit the centers for informal observations, conduct staff interviews, and submit questionnaires to the school staff.

INDIRECT SERVICES

For assessment of indirect services provided by the Project staff to other students in the Centers the Consultant was to visit the Centers, interview the Project staff, and submit questionnaires to the school staff.

STAFF DEVELOPMENT

The attainment of objectives related to staff development was to be assessed through interviews with Project teachers and the Project Director.

CURRICULUM MATERIALS

The attainment of objectives related to curriculum materials was to be assessed by observation at the Centers and interviews with the staff.

PARENT INVOLVEMENT

The attainment of objectives related to parent involvement was to be assessed by questionnaires and through interviews of parents and staff.

SECTION III - EVALUATION FINDINGS

In this section evaluation findings are presented with a minimum of interpretative commentaries. The interpretations of the evaluation findings will be discussed in the following section.

PUPIL ACHIEVEMENT

READING: ENGLISH AS A DOMINANT LANGUAGE

The results of the Bond and Tinker analysis of English as a dominant language reading are given in Table 1, (Page 9). A total of twenty-nine (29) valid pairs of pretest and posttest scores on the IAS Test of Reading were obtained for all grades in the Project. For the third and fourth grades only, five (5) pairs of grades were available; nine (9) and seven (7) pairs of scores for the second and fifth grades respectively, three (3) for the first grade.

The first graders obtained a higher actual posttest mean score than the expected posttest mean socre, but the difference was not statistically significant. These findings must be disregarded as questionable because the students had no previous schooling and the "normal" rate growth inherent in the grade equivalent scores of these tests was assumed, i.e. 0.1 GE per month, starting from their actual pretest score in order to derive the expected or predicted posttest score. A more definate analysis of the first grade English reading achievement scores is given in Table 2 (page 10).

TABLE - I

English as a Dominant Language: Reading Achievement
Inter-American Series, Test of Reading
Grade Equivalent Total Score Analysis
Bond and Singer Method

		Actual Post-test Scores			Expected Post-test Scores			
Grade	Level	Number Tested	Mean (GE)	Standard Deviation	Number Tested	Mean (GE)	Standard Deviation	t (d)
First	I	3	1.9	.47	3	1.7	.2	1.836
Second	II	9	3.0	.55	9	2.1	.68	2.184
Third	II	5	3.3	.94	5	2.7	.75	2.786
Fourth	II	5	4.0	.68	5	3.1	1.3	2.014
Fifth	II	7	4.1	.82	7	3.8	.94	2.00

TABLE 2

English as a Dominant Language: Reading Achievement
Inter-American Series, Test of Reading
Grade Equivalent Total Score Analysis
Pre-test - Post-test Method

		Pre-test Scores			Post-test Scores			
Grades	Level	Number Tested	Mean (GE)	Standard Deviation	Number Tested	Mean (GE)	Standard Deviation	t (d)
First	I	3	1.4	.22	3	1.9	.47	1.4127
Second	II	9	1.8	.55	9	3.0	.55	3.4042
Third	II	5	2.3	.64	5	3.3	.94	5.1538
Fourth	II	5	2.7	1.1	5	4.0	.68	3.7217
Fifth	II	7	3.4	.81	7	4.4	.82	2.6187

The second graders achieved their objective for English reading obtaining an actual posttest mean of 3.01 (SD = .55) with t = 2.184 as compared to an expected posttest mean of 2.1 (SD = .464)

The third graders obtained an actual posttest mean of 3.3 (SD = .94) as compared to an expected posttest mean of 2.7 (SD = .75) with t = 2.786. The third graders achieved their English reading objective.

The fourth graders obtained and actual posttest mean of 4.0 (SD = .68) as compared to an expected posttest mean of 3.1 (SD = 1.3). This group narrowly missed achieving the desired statistical criteria. The fact that the group is small and that the criteria was missed by a narrow margin tends to suggest that the achievement of the fourth graders may be educationally significant.

The fifth graders failed to achieve their objective for English reading by a small margin. They scored an actual posttest mean of 4.1 (SD = .82) as compared to an expected posttest eman of 3.8 (SD = .94).

Table 2 gives a re-analysis of the scores for English as a dominant language reading utilizing a (t) test comparison of pretest and posttest scores. As is shown in Table 2, the third graders demonstrated a highly significant improvement in mean scores. Grades two, three and five demonstrated a statistically significant improvement in their mean scores. The first grade did not improve their mean scores to

show a significant difference. It is to be noted that with so few socres no complete and definate statement can be made as to the educational significance of the first grades achievement.

READING: SPANISH AS A DOMINANT LANGUAGE

The results of the Bond and Tinker analysis of Spanish as a dominant language reading are given in Table 3 (page 13). A total of twenty-six valid pairs of pretest and posttest scores on the IAS Prueba de Lectura were obtained for grades one (1) through three (3) and grade five (5).

The first graders obtained a substantially higher actual posttest score than the expected posttest mean scores. They achieved their reading objective for Spanish reading. However, these results can be disregarded as questionable for the same reasons as given for the first graders tested in English; the Bond and Tinker method is not totally appropriate for the students with no previous academic experience.

The third graders significantly achieved their objective for Spanish reading; scoring an actual posttest mean of 3.5 (SD = .83) as compared to an expected posttest mean of 2.7 (SD = .83).

The second and fifth graders achieved higher actual posttest scores than expected posttest scores. The second graders achieved criteria, the fifth graders came close to achieving the criteria in this analysis.

TABLE - 3

Spanish as a Dominant Language: Reading Achievement
Inter-Americana Series, Prueba de Lectura
Grade Equivalent Total Score Analysis
Bond and Singer Method

		Actual Post-test Scores			Expected Post-test Scores			
Grade	Level	Number Tested	Mean (GE)	Standard Deviation	Number Tested	Mean (GE)	Standard Deviation	t (d)
First	I	8	3.2	.44	8	1.7	.52	7.129
Second	II	8	3.2	.67	9	2.7	1.1	2.139
Third	II	7	3.5	.83	7	2.7	.83	2.640
Fifth	II	3	4.4	1.2	3	3.5	.75	2.000

TABLE - 4

Spanish as a Dominant Language: Reading Achievement
Inter-Americana Series, Prueba de Lectura
Grade Equivalent Total Score Analysis
Pre-test - Post-test Method

		Pre-Test Scores			Post-Test Scores			
Grade	Level	Number Tested	Mean (GE)	Standard Deviation	Number Tested	Mean (GE)	Standard Deviation	t (d)
First	I	8	1.4		8	3.2	.44	8.465
Second	II	8	2.3		8	3.2	.67	2.8022
Third	II	7	2.4		7	3.5	.83	3.735
Fifth	II	3	3.1		3	4.4	1.2	2.519

The pretest - posttest analysis of Spanish reading achievement given in Table 4 (page 14) shows that the first and third graders made a highly significant improvement in their mean reading scores. The second graders also showed improvement in their mean reading scores. The fifth graders achieved a .9 increase that was not statistically significant.

The grades making significant improvements in Spanish reading also demonstrated this in their mean scores; the first graders advanced by a 1.8 grade equivalent from 1.4 to 3.2; the second grade adavanced by a .9 grade equivalent from 2.3 to 3.2 and the third grade advanced 1.1 grade equivalent from 2.4 to 3.5.

SELF CONCEPT

A very modest effort was made to assess self-concept and the test, Rosenberg's Self-Concept Inventory, was administered at the beginning and conslusion of the academis year. Table 5 (page____) gives the results. A total of twenty-seven (27) usable pairs of scores were selected from the English dominant groups and twenty-eight (28) usable pairs of scores were selected from the Spanish dominant groups. The mean socres differ very little from pretest to posttest in both groups.

TABLE - 5

Self-Concept: English and Spanish Dominant Students
Test: Rosenberg Self-Concept Inventory
Pre-Test - Post-Test Method

English Dominant Group

	Pre-Test Scores	Post-Test Scores
N	29	29
M	6.62	6.72
SD	1.8	1.8

Spanish Dominant Group

	Pre-Test Scores	Post-Test Scores
N	28	28
M	7.2	7.6
SD	1.6	2.3

PROGRAM EDUCATIONAL PROCESS

PUPIL SELECTION

Project BUILD services bilingual children who are considered learning disabled. The criteria for selecting the students to the Project reads, "a significant descrepancy between academic skills and general ability". Since most of the children enrolled last year are still participating in the Project, the battery of selection instruments was administered mostly to incoming firs year students.

The potential participants were given the New York City Language Assessment Battery (LAB) as the only measure of language dominance. Then, either the Wide Range Achievement Test or the Prueba de Habilidad General, (depending on the language dominance) and Goodenough-Harris Draw-a-Man were given to identify pupils with discrepancies between academic achievement and general ability. The Slingerland Screening Tests for Identifying Children with Specific Learning Disabilities were given to determine language impairments that relate to reading, writing, spelling and speaking.

One hundred pupils were enrolled in grades 1 through 6 to recieve the Project's direct services. By the end of the academic year 1979-80 the Project was serving approximately 84 students, as 16 had been transferred out of the participating schools. Pupils detected by the screening battery as having minor learning problems recieved indirect services from

the Project staff in the form of informal consultation with the bilinbual classroom teachers and suggestions and sharing of materials.

In this Consultant's opinion there is evidence to indicate that Project selection proceedures were generally valid during 1979-80. The analysis of the achievement of students selected this year supports the Project's selection of pupils. Of the group selected for the English-dominant group all were performing under grade level. In the Spanish-dominant group only 9 approached to near grade level functioning in reading but their functioning in Math is very low. The posttesting indicated that despite individual gains in the English-dominant group there are fifteen (15) students who are not achieving their expected level in reading. In the Spanish-dominant group there are five (5) students that have raised their reading rate but who are still working below their expected grade levels. Low achievement in an by itself does not indicate learning disabilities and the Project Staff and this Consultant agree that some of the selected pupils are not true learning disabled, but that their school performance is affected by either social or emotional factors. However, considering the present state of the art in the field of learning disabilities regarding definition and need of valid and reliable techniques for its diagnosis, some problems in the selection of participants are to be expected.

Moreover, because of this Project's uniqueness, its Staff is also confronted with the total lack of reliable and valid criteria to detect this condition with absolute precision in bilingual children.

The use of the Goodenough-Harris, Draw-a-Man as a measure of general learning ability is considered inadequate for the purposes of this Project, given that the only aspect of intelligence the instrument measures is detailed recognition.

DIRECT SERVICES

The Project's Centers were visited by this Consultant during various periods throughout the second semester of the academis year of 1979-80. The direct services provided by the Learning Disabilities Specialists and other Staff members were in this Consultant's opinion effective and in compliance with the Project's specifications. Educational evaluations were written for each admitted student and the findings were incorporated into the individual educational plans used by the Specialist to guide the student's daily individual instruction. With the English-dominant group the Woodcock Reading Mastery Tests and the Key-Math were used in diagnosing weaknesses and strengths in reading and math respectively. As is the case with the screening instruments, there is an almost total lack of valid diagnostic instruments that can be used with bilingual learning disabled (especially in Spanish) children. It was encouraging to observe how the teachers and the

staff being confronted with this problem have developed informal diagnostic tasks and are using the diagnostic information thus obtained to plan the student's instruction. In addition to the individual educational plans a profile sheet and progress record in reading and math were maintained for each student.

All students, screened and accepted, to be serviced by Project BUILD are given a psychological evaluation.

As reported by the Project Learning Disabilities Specialists during the year 1979-80 five of the newly admitted students were referred to outside agencies.

After several in-site observations of the Project BUILD Staff, this Consultant's opinion is that the strongest component and most encouraging aspect of the Project is the teaching component; how the Learning Disabilities Specialists and the Educational Assistants implement their teaching. It is rewarding to observe their efficiency and how they carry out instructional and remediational activities in their respective laboratories. They are able to create a supportive environment that paired to effective use of well structured teaching practices promotes the student's learning and their motivation for learning. They seemed tireless in their efforts to help the students and work with them.

The questionnaire survey of eleven (11) regular bilingual classroom teachers indicates that they considered the direct services of the Projedt vital to their schools and the other five (5) considered the services an advantage to their schools.

INDIRECT SERVICES

In interviews between this Consultant, the Project Director and the Learning Disabilities Specialists it was indicated that whenever possible they assist the bilingual classroom teachers by suggesting appropriate teaching techniques and materials to be used with the Project's students as well as with the other bilingual students in the class. They also indicated that given the number of students seen during the day the time factor limits somewhat these indirect services on their part. Nevertheless, the eleven (11) classroom teachers who answered the questionnaires reported that communication in general, between the Learning Disabilities Specialists has increased notably. (See Appendix____).

This Consultant feels that a good learning resource center in each of the schools is an effective and useful way of rendering indirect services to the other classes in the school.

STAFF DEVELOPMENT

The Staff development this year is considered by this Consultant as satisfactory. The Project Staff participated in a series of in-service workshops conducted by the Project Director and an outside consultant. Three of the teachers are enrolled in Learning Disabilities Masters programs at a local university. The Staff still considered, as was communicated to this Consultant, that, "the need for training in the practical and every-day ways" of teaching bilingual learnind disabled is greatly needed.

PARENT INVOLVEMENT

As indicated by the Project's Staff in a personal interview with this Consultant, parent involvement in Project BUILD has improved somewhat. In the thirteen (13) questionnaires received from parents, five (5) were said to have attended five (5) meetings held by the Project this year. All respondents have talked to the Project Staff members more than once during the year. All but one respondent are said to have participated in the different activities sponsored by the Project. Twelve (12) respondents have actually observed classes from one (1) to three (3) times. All respondents acknowledged the fact that communications from the Project have been recieved by them in the form of: bulletins, letters, announcements, notes, and telephone communication. One (1) respondent informed of a visit from the family coordinator.

CURRICULAR MATERIALS

A considerable amount of materials were purchased by the Project. Both the Staff and the Bilingual Classroom Teachers have accessibility to the curricular materials. Although it is known of the limited number of dialectic materials in Spanish, the Project Director has been attentive to the new releases of adequate materials published in Spanish and has acquired some. During on-site visits to the Centers this Consultant has observed a sizeable amount

of curricular materials either adapted or produced by the Project Specialists, yet no systematic effort has been made to collect them and prepare them in such way so as to make their use possible by other teachers and with other students.

SUMMARY

BILINGUAL CLASSROOM TEACHERS' QUESTIONNAIRE FINDINGS

Eleven (11) bilingual classroom teachers responded to the questionnaire submitted to them by this Consultant. The majority (72%) of the respondents considered the selection of pupils made by Project BUILD for the academic year 1979-80 above average or outstanding.

The improvement in reading, reading motivation, math, social behavior, and self esteem was perceived by the respondents as mainly due to Project effectiveness as was the progress of the pupils exacted from the program. Six (6) of the eleven (11) teachers considered the Project services as vital to their school. The remaining four (4) teachers considered Project services as an advantage to their schools.

In assessing the Project's direct services two (2) of the teachers wrote the following comments:

"I felt that the services were very good. The children look forward to going to classes. They have recieved the instruction on a "one-to-one" basis that I could not provide".

And: "This program gives the children the opportunity to receive individual help, working in small group situations which, I think, is very valuable for these children".

SECTION IV - DISCUSSION AND INTERPRETATION OF FINDINGS

In this section the Consultant will discuss and will try to interpret, to the best of her judgement, all the findings presented in the previous sections.

PUPIL ACHIEVEMENT

READING

Two types of factors will first be considered, that in this Consultant's opinion have affected the findings of this evaluation, and furthermore, have complicated their interpretation. There are general factors that affect the implementation of Project BUILD or any other similar program which intends to service students who are bilingual and learning disabled. For one, the lack of available information as to what are the important components of educational programs for bilingual, learning disabled students and how they are to be evaluated. The guidelines for the implementation and evaluation of such programs, to the best of this Consultant's knowledge, have been originally devised either for bilingual programs or for learning disabilities programs, but not specifically for educational programs serving students who are both. The rwo educational areas are still beset by questions in reference to proper definitions of students to be served; reasonable goals and objectives relating to the rate of learning; the lack of oppropriate screening and diagnostic instruments, appropriateness of standardized testing instruments to measure progress in learning, the areas of academic and socila learning to be stressed by program treatment; length of time

and frequency of instruction in both the regular class and the treatment facilities. All of the above are part of the mentioned lack of information and guidelines for program implementation and evaluation that complicate the interpretation of findings of Project BUILD.

The second type of factor that affects and limits the interpretability of Project BUILD's evaluation findings are more specific as related to the project. Due to the nature of this project, as has been true in previous years, the small number of scores available at each grade level limits the meaningfulness and generalizability of reading results.

The Bond and Tinker method of analyzing reading scores uses each student as his/her own control, thus, its use minimizes the problems of loss of students due to mobility and the difficulties involving other groups for testing. Yet, the method is not totally appropriate for first graders without previous school experience. The reading performance of these groups was mainly judged by the pretest - posttest comparison of their mean scores. The method ideally should be used to analyze reading growth for a program's whole history, not just for the span of one year. Again, because the nature of the project and the locations of the settings, to apply the methd for three or four years of the Project's service, would have resulted in less available usable pairs of scores to analyze .

For an educational program whose main objectives are related to communication skills for bilingual, learning disabled students, the correct determination of language dominance of

the serviced students is an important one. Last year it was possible to obtain hard data on the lack of adequacy of the classification of the Project's students as to their language dominance. Such data is not available this year, but, the Project staff has indicated to this Consultant that through their work with the students they have become aware of the need for more accurate methods to determine language dominance. The learning problems exhibited by the Program's students may demand a more in-depth assessment of their language dominance. (Recommendations to this effect will be made in the proper section.)

Besides the small number of student scores to be used in the Project's evaluation; the uniqueness of the Project that makes guidelines and information scarce; and the doubt as to how exact the established participants language dominance is, there is still another factor to consider when interpreting the Project's evaluation results. The present evaluation design is not totally effective in separating the impact of Project BUILD in reading achievement as opposed to the impact of the regular classroom. The general academic progress of students served in a resource room setting is the product of the combination of services in both settings, the exact calibration of the impact of one over the other demands a special design which can be worked into the complications of such an educational arrangement and the daily realities of school functioning.

With the above conditions in mind, the overall assessment of students' reading achievement during the academic year 1979-80 is summarized in Table 6 (page 29) and Table 7 (page 30) and shall be discussed.

Table 6 summarizes the reading achievement of groups of students whose dominant language is English. The third, fourth and fifth grades met their objective fully, and the second grade approached criteria in one method and met criteria in the other. The second grade achieved its reading English objective in a weaker way than the rest of the grades. The first grade students improved individually on their reading scores, but the improvement as a group was not meaningful and their achievement was undetermined.

Table 7 summarizes the reading achievement of groups of sutdents whose dominant language is Spanish. The first, secong and third grade achieved their reading objectives, with the first and second grades achieving their reading objectives strongly. The three students in the fifth grade closely achieved criteria in one method and gained 2.2; .4 and 1.3 grade level in the other. Their gains as a group in the Bond and Tinker method was close to criteria, the few scores made it difficult to determine the meaningfulness of the results, statistically speaking. But in this Consultant's opinion the fact that two students improved their scores to equate a one grade equivalent is educationally meaningful. The student in the fourth grade improved his reading grade level by .3.

TABLE 6

ENGLISH AS A DOMINANT LANGUAGE READING OBJECTIVES

Extent To Which Grade Achieved or Approached Criteria of P=.05

Grade	Number of Students	Bond and Tinker Method	Pre-Test - Post-Test
1	3	X	X
2	9	Achieved	Achieved
3	5	Achieved	Strongly Achieved
4	5	Achieved	Strongly Achieved
5	7	Achieved	Achieved
6	1		(Improved by .9 G.E.)

X - Undetermined

TABLE 7

SPANISH AS A DOMINANT LANGUAGE READING OBJECTIVES

Extent to Which Grades Achieved or Approached Criteria of P = .05

Grade	Number of Students	Bond and Tinker Method	Pre-Test - Post-Test
1	8	Strongly Achieved	Strongly Achieved
2	8	Achieved	Achieved
3	7	Strongly Achieved	Strongly Achieved
4	1	X	(Improved by .3 G.E.)
5	3	Closely Achieved	Achieved
6	0	X	X

For the English groups the data available made possible the evaluation of five reading objectives out of the possible six. (The sixth grade objective could not be subjected to any analysis due to a lack of available scores.) Four of the five objectives evaluated were attained. The first graders made individual progress in their posttest scores, but as a group the increment was not statistically significant to reach the Project's established standard to consider their objective obtained.

For the Spanish groups the data available made possible the evaluation of four of the Project's reading objectives.

The objectives for the fourth and sixth graders were not measured because there was only one student in the fourth grade and none in the sixth grade. Four out of six reading objectives for Spanish were measured. All groups attained their Spanish reading objectives. The fifth graders were short of criteria on the Bond and Tinker method, but achieved in the other method (.994 grade level). In consideration of the few cases involved it is this Consultant's opinion that the reading objectives for Spanish were attained by the fifth graders.

Project BUILD achieved success this year in promoting the achievement of its English and Spanish reading objectives. Of the four achieved reading objectives for English; two were strongly achieved and two wer achieved in an adequate manner. Of the four achieved Spanish objectives, two

were strongly achieved, on adequately achieved and one was achieved in a weak manner.

In sum, during the 1979-80 academic year Project BUILD achieved eight of the nine reading objectives, and furthermore, this Consultant must indicate that students served by Project BUILD actually recieved none months of direct Project instruction, not ten, since the first month of the academic year is dedicated to the implementation of the screening and selection proceedures.

OTHER AREAS OF ACHIEVEMENT

During visits to the Project Centers, this Consultant found other evidence that indicates Project BUILD's impact on the students it served. The bilingual classroom teachers perceived that Project students are more active in classroom participation, improved in both receptive and expressive language, more willing to participate in classroom activities, and a good majority exhibiting very accepatble classroom behavior. In their replies to the questionnaires presented them they attribute the progress made by the students in reading, math and behavior to Project BUILD's intervention.

SELF-CONCEPT

The self-concept test: Rosenberg Self-Concept Inventory was administered at the beginning and at the end of the academic year 1979-80. The English and Spanish dominant groups

both showed a slight increase in their mean scores on the inventory. The difference in improvement is insignificant so as to permit any reasonable interpretation. The Project's Specialist in Learning Disabilities and the Educative Associates expressed to this Consultant that the students, while taking the test, seemed reluctant and not enthusiastic about answering the questions presented.

Aside of the test results, the Specialist, the Educational Associates and the bilingual classroom teachers plus the parents interviewed, agreed that, by the end of the year many of the students serviced by the Project acted more confident, appeared happier and more comfortable in school.

PROGRAM EDUCATIONAL PROCESSES

The selection of students to be serviced by Project BUILD for the year 1979-80 has been done by the Project Staff plus some input by the regular classroom teachers. Although the "discrepency criteria" (not totally accepted in the field of learning disabilities) still appears in the Project plan, the definition given by Federal Law PL 94-142 (The Education for All Handicapped Children Act) was considered when the screening and selection was done.

The selection proceedures for the academic year 1979-80 were generally valid, but improvement is indicated by a selection of better measures of general ability and achievement measures in Spanish.

DIRECT SERVICES

The direct services provided by the Project are effective and in compliance with the Project's specifications. Educational evaluations were done by the Specialists and a number of diagnostic instruments in English were used to determine the strengths and weaknesses in the students learning. As a remedy for the lack of informal diagnostic tests in Spanish, the Bilingual Specialists have developed informal diagnostic tasks for both reading and math. The diagnostic information is incorporated into the plan of instruction for each student.

Project students received daily instruction at the Project's laboratories or resource rooms for a period of fourty-five minutes daily. Records are kept of the students' progress in the different communication skills.

The Project Director worked closely with the Bilingual Learning Disabilities Specialists and was very attentive to their needs for implementing instruction. Feedback, on site supervision and meetings, both in groups and individually were offered throughout the year 1979-80. The comfortable professional relationship that exists between the Project Director and the Staff was very evident to this Consultant when attending meetings and activities. The strongest component of the Project is the teacher's component; the Bilingual Specialists and the Educational Associates. They can

promote respect and maintain appropriate classroom behavior of the individual student as well as of groups of students; select appropriate methods and materials with which to teach the students; produce and use well teacher-made materials and adapt commercial materials. Their initiative and enthusiasm is evident in the different activities conducted by them in the resource rooms.

INDIRECT SERVICES

Indirect Services were provided throughout the year to other classes and to students in the bilingual regular classrooms in the form of suggestion of appropriate teaching techniques and materials to be used.

Although no specific time was set aside during this past year for the Bilingual Specialist and bilingual classroom teachers to meet, the bilingual teachers indicated that communications between the two groups has increased this year. Of eleven (11) bilingual regular classroom teachers consulted, eight (8) indicated that they would like to recieve training in the field of learning disabilities. In this Consultant's opinion the Project Staff is well qualified to offer some of this training. The training of the bilingual regular teaching staff will be of benefit to the Project's students as well as the students in the regular classes, to whom some of the techniques and proceedures in the field of learning disabilities can be applied.

STAFF DEVELOPMENT

The Staff of Project BUILD has participated with great enthusiasm in the series of workshops conducted by the Project Director and an outside Consultant. The Staff is receptive to training and their efficiency in the resource rooms reflects the benefits recieved from formal training at the Universities as well as from the workshops offered by the Project. Their assistance to professional activities in the areas of bilingual education and learning disabilities has been very satisfactory this year.

PARENT INVOLVEMENT

Parent involvement in Project BUILD improved during the past year. More parents visited the resource rooms and sought communication with the Project Staff. Due to the nature of the learning problems faced by the students serviced by the Project a greater parent involvement is needed. Written communication in the form of short newsletters or bulletins, published on a regular basis should be experimented with.

CURRICULAR MATERIAL

The amount of materials purchased by the Project is considered to be satisfactory. The initiative and alertness of the Project Director is evident in this aspect of the Project. There is a considerable amount of materials either adapted or

produced by the Project Specialists that deserves to be prepared so as to have said material available for re-use and dissemination.

SUMMATION

Despite all the limiting factors enumerated throughout this report affecting Project BUILD's functions and evaluations as an educational program it can be said that this program was highly successful during the academic year of 1979-80. The Project's reading objectives for its serviced students in both languages were attained. Improvement in other areas, although not quantitively measured, was evidenced by other less exact but acceptable ways, (i.e., observations, personal communication, teacher and parent perception.)

The assessment of the student's achievement, in this Consultant's opinion was complicated and not completely satisfactory. The uniqueness and nature of Project BUILD defies the appropriatness of the evaluation design and the analysis and interpretation of results.

The Project's educational processes of selection, direct and indirect services, staff development, parent involvement, and curricular materials were well implemented.

There is no doubt that the Project has improved in all of its components and despite all the problems mentioned continuation of the Project is recommended. The continuation is

justified by the findings of this evaluation precisely due to its experimental nature. The Project's continuation with the primary aim to develop a model program that will benefit and enhance the educational services for both bilingual and learning disabilities populations, is indeed recommended.

SECTION V - RECOMMENDATIONS

1. Incorporate the Federal definition of learning disabilities.

2. Supplement the use of the LAB with the Boehm Test of Basic Concepts (English and Spanish) as a way to insure effective assessment of language dominance.

3. Experiment with the use of the Raven Progressive Matrices this year to determine if it is a more sensitive measure of ability for bilingual children as opposed to the Goodenough-Harris, Draw-a-Man.

4. Consider using the Horst Test of Reversals for added screening information.

DIRECT SERVICES

1. Insist on daily instruction at the laboratory rooms for each student.

2. Review the format of the individual's educational plan.

3. Specify and write an "exit of program criteria."

4. Consider the training and use of peer tutors in the resource room.

INDIRECT SERVICES

1. Plan with school directors for training of bilingual classroom teachers. Most of the training can be carried by the Bilingual Learning Disabilities Specialists.

CURRICULUM AND MATERIALS

1. Devise a way to collect and prepare for disseminition teacher-made materials.

2. Stay attentive and informed of new curricular materials, both Spanish and English, designed for bilingual and/or learning disabled children.

PARENT INVOLVEMENT

1. Plan and initiate the publication of a short newsletter or bulletin specifically directed to the Project's parents.

APPENDIX I

RESULTS OF ELEVEN (11) QUESTIONNAIRES COLLECTED FROM BILINGUAL REGULAR CLASSROOM TEACHERS

I How would you rate effectiveness of Project Build in:

A. Selection of pupils

Unsatisfactory	--	---
Below Average	--	---
Average	3	27.3%
Above Average	5	45.4%
Outstanding	3	27.3%

B. Improvement of pupil motivation to read.

Unsatisfactory	--	---
Below Average	--	---
Average	3	27.3%
Above Average	5	45.4%
Outstanding	3	27.3%

C. Improvement of reading in English Dominant child.

Unsatisfactory	--	---
Below Average	--	---
Average	5	50%
Above Average	3	30%
Outstanding	2	20%

D. Improvement of reading in Spanish Dominant child.

Unsatisfactory	--	---
Below Average	--	---
Average	4	40%
Above Average	4	40%
Outstanding	2	20%
Not applicable	1	

E. Improvement in Mathematics

Unsatisfactory	--	---
Below Average	1	9%
Average	4	36.4%
Above Average	4	36.4%
Outstanding	2	18.2%

F. Improvement in socialization and behavior.

Unsatisfactory	--	---
Below Average	1	9%
Average	4	36.4%
Above Average	3	27.3%
Outstanding	3	27.3%

G. Self-Esteem

Unsatisfactory	--	---
Below Average	--	---
Average	3	27.3%
Above Average	4	36.4%
Outstanding	4	36.4%

H. Progress made by pupils exited from the program.

Unsatisfactory	--	---
Below Average	--	---
Average	2	18.2%
Above Average	6	54.6%
Outstanding	2	18.2%

II How essential were Project BUILD services to your school?

Vital	6	54.5%
Advantageous	5	45.5%
Ineffectual	--	---

III Would you like to participate in in-service training in Bilingual Learning Disabilities in the future?

Yes	7	63.6%
No	2	18.2%
Other	2	18.2%

APPENDIX II

SUMMARY OF RESPONSES FROM THIRTEEN (13) QUESTIONNAIRES RECIEVED FROM PARENTS OF A TOTAL OF FIFTEEN (15) SUBMITTED

1. Meetings attended

Meetings attended	0	1	2	3	4	5
Parents attending	1	1	0	2	4	5

2. What type of communication have you recieved from Project BUILD this year?

None	0	Teacher's Note	9
Bulletins	4	Telephone Calls	2
Letters	5	Home Visits	1
Newsletters	6		

3. Does the Project Staff communicate with you in a language you understand well? (Orally or written).

Yes	13
No	0

4. In what type of activity have you participated in this year?

None	1
Program planning	5
As a volunteer worker	5
Parents Association	7
Cultural Activities	8
Other	1

5. How many times have you conferred with Project teachers?

Frequency	0	1	2	3	4	5	6	7	8	9	10
Number of parents	0	0	2	2	0	2	0	1	1	3	4

More than ten (10) times 3

6. How many times have you observed teaching in Project BUILD classes?

Frequency	0	1	2	3	4	5+
Number of parents	2	2	3	1	0	5

7. Have you observed favorable changes in your child since he started in Project BUILD?

Yes	12
No	1

8. Do you think that your childs participation in the Project has improved his/her school performance?

Yes	13
No	0

9. Has the attitude of your child toward school improved since his/her assistance to Project BUILD?

Yes	12
No	1

10. Has your child's behavior at home improved since his/her assistance to Project BUILD classes?

Yes	10
No	3

11. Do you think that your child reads better?

Yes	11
No	1

12. Do you think that your child speaks better?

Yes	12
No	1

13. How would you rate parent participation in Project BUILD?

Good	3
Average	6
Below Average	1
Poor	1

14. In general the quality of the Project's Staff appears to you as:

Excellant	6
Good	3
Average	3
Deficient	0
No information	1